

Notice of Allowability

Application No.

09/880,583

Examiner

Pedro J. Cuevas

Applicant(s)

EMERY, FRANKLIN T.

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on September 2, 2003.
2. ☒ The allowed claim(s) is/are 1-20.
3. ☒ The drawings filed on 15 May 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- * Certified copies not received: _____.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. _____.
 - (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
 - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the margin according to 37 CFR 1.121(d).

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1 <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____ |
| 3 <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No. _____ | 7 <input type="checkbox"/> Examiner's Amendment/Comment |
| 4 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9 <input type="checkbox"/> Other _____ |

DETAILED ACTION

Allowable Subject Matter

1. Claims 1-20 are allowed.
2. The following is an examiner's statement of reasons for allowance.

Von Musil et al. clearly teaches the construction of an electrical isolation layer system comprising:

a first conductive material comprising a plurality of copper strands;

a second conductive material comprising a roebel filler; and

a felt having a dielectric strength of at least 300 volts per millimeter interposed at least partially between the copper strands and the roebel filler wherein:

the felt has a dielectric strength of at least 500 volts per millimeter, and is arranged in any of the following configurations:

above the upper surface of the copper strands and below the lower surface of the roebel filler;

below the upper surface of the copper strands and above the lower surface of the roebel filler;

to sheath at least one copper strand; or

to sheath all the copper strands,

the plurality of copper strands include at least 30 roebelled copper strands and are sheathed by a porous insulating material,

the roebel filler includes a mica material,

the isolation layer has an adhesive coated on at least one side of the isolation layer; and

a strand assembly for use within a stator of a dynamoelectric machine of a power generation plant, comprising:

- a plurality of roebelled conductive strands that extend along a generator length;
- an insulator sheathing each of the strands;
- a conductive filler at least partially surrounding the insulated strands; and
- an electrical isolation layer disposed at least partially between the insulated strands and the conductive filler material wherein the isolation layer:
 - has a dielectric strength of at least 300 volts per millimeter,
 - comprises a nomex spun laced felt,
 - has an adhesive covering at least one side of the isolation layer,

and

can withstand an operating temperature of at least 130° C.

DuPont teach the construction of NOMEX[®] brand fibers for the purpose of providing high levels of electrical, chemical, and mechanical integrity when converted into its various sheet forms –primarily papers and pressboards- when used in transformers, motors, generators, and other electrical equipment.

The prior art of record, taken alone or in combination, fails to teach the construction of an electrical isolation layer system as described by:

independent claim 1, comprising a NOMEX fiber spun laced felt having a dielectric strength of at least 300 volts per millimeter being positioned to abut an outer surface of the copper strands and an inner surface of the roebel filler to thereby be interposed at least partially between the copper strands and the roebel filler;

independent claim 12, comprising an electrical isolation layer positioned to abut an outer surface of the plurality of roebelled strands and an inner surface of the conductive filler and disposed at least partially between the insulated strands and the conductive filler material; and

independent claim 17, comprising an isolation layer that abuts an outer surface of the insulated strands and abuts the inner surface of the conductive filler and thereby electrically isolates the strands from the filler.

Dependent claims 2-11, 13-16, and 18-20 are considered allowable by their respective dependence on allowed independent claims 1, 12, and 17.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pedro J. Cuevas whose telephone number is (703) 308-4904. The examiner can normally be reached on M-F from 8:30 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor R. Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3432 for regular communications and (703) 305-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Pedro J. Cuevas
November 7, 2003


BURTON S. MULLINS
PRIMARY EXAMINER